

Docket No.: M4065.0461/P461 (PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Kie Y. Ahn, et al.

Application No.: 09/910,914

Group Art Unit: 2823

Filed: July 24, 2001

Examiner: S. Foong

For:

COPPER TECHNOLOGY FOR ULSI

**METALLIZATION** 

LECHNOLOGY CENTER 5800

## **INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed more than three months after the U.S. filing date, OR more than three months after the date of entry of the national stage of a PCT application, AND after the mailing date of the first Office Action on the merits, whichever occurs first, but before the mailing date of a Final Rejection or Notice of Allowance.

A concise explanation of relevance of the items listed on form PTO/SB/08 is:

07/30/2003 MAHMED1 00000070 09910914

[X] not given

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Application No.: 09/910,914 Docket No.: M4065.0461/P461

	]	given	for	each	listed	item
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- [ ] given for only non-English language listed items
- [] in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references

While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR 1.56, it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

Please charge our Credit Card in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p). Credit Card Payment Form SB-2038, with a signature from an authorized cardholder, is enclosed. The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No.

Application No.: 09/910,914 Docket No.: M4065.0461/P461

04-1073, under Order No. M4065.0461/P461.

Dated: July 26, 2003

Respectfully submitted,

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Gabriela I. Coman

Registration No.: 50,515

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PTO/SB/08a/b (05-03)
Approved for use through 05/31/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449/PTO			"	Complete if Known					
300	State for form 1445/110			Application Number	09/910,914  July 24, 2001  Kie Y. Ahn  2823  S. Foong				
IN	<b>IFORMATION</b>	l DI	SCLOSURE	Filing Date					
S	TATEMENT E	3Y /	APPLICANT	First Named Inventor					
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	(use as many she	eets as	necessary)	Examiner Name					
Sheet 1 of 1		1	Attorney Docket Number	M4065.0461/P461					

U.S. PATENT DOCUMENTS									
Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant				
Initials*	No.1			Applicant of Cited Document	Figures Appear				
	AA	US-6,395,632	05-28-2002	Farrar					
	AB	US-6,498,090	12-24-2002	Morozumi					
	AC	US-6,531,777	03-11-2003	Woo et al.					
	AD	US-6,352,938	03-05-2002	Chen et al.					

FOREIGN PATENT DOCUMENTS									
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS								
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>					

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation attached.

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Examiner	Date
Signature	Considered
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PTO/SB/17 (05-03)

Approved for use through 04/30/2003. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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		Complete if Known						
FEE TRANSMITTAL		Application Number				09/910,914-Conf. #2806		
for FY 2003						July 24,	2001	
		First Named Inventor			ntor	Kie Y. Al	nn	
Effective 01/01/2003, Patent fees are subject to annual revision.	Examiner Name			S. Foong				
Applicant claims small entity status. See 37 CFR 1.27					2823			
		Art Unit 2823  Attorney Docket No. M4065.0461/P461			461/D461			
TOTAL AMOUNT OF PAYMENT (\$) 180.00		Altorr	iey Do					
METHOD OF PAYMENT (check all that apply)	ļ			FEE	CALCUL	ATION (co	ontinued)	
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Number 04-1075	Code		Code	(\$)		Fee Des	cription	Fee Paid
Deposit Dickstein Shapiro Morin &	1051	130	2051	65	Surcharge -	late filing fe	ee or oath	
Account Name Oshinsky LLP			ł		•	•	onal filing fee or cover	
The Director is hereby authorized to: (check all that apply)	1052	50	2052	25	sheet.	idio piovioi	ona. mmg loo ol ootol	
Charge fee(s) indicated below X Credit any overpayments	1053	130	1053	130	Non-English	English specification		
Charge any additional fee(s) during the pendency of this	1812	2,520	1812	2,520	For filing a re	g a request for ex parte reexamination		
application  Charge fee(s) indicated below, except for the filing fee	1804	920*	1804	920*	_	publication of	of SIR prior to	
to the above-identified deposit account.	1805	1,840*	1805	1,840*		publication of	of SIR after	
FEE CALCULATION	1251	110	2251	55		or reply withi		
1. BASIC FILING FEE	1252	410	2252	205	Extension fo	or reply with		
Large Entity Small Entity	1253	930	2253	465	Extension for	or reply withi	n third month	
Fee Fee Fee Fee <u>Fee Description</u> Fee Paid Code (\$) Code (\$)	1254	1,450	2254	725	Extension for	or reply withi	n fourth month	71
1001 750 2001 375 Utility filing fee	1255	1,970	2255	985	Extension fo	or reply within	n fifth month	m
1002 330 2002 165 Design filing fee	1401	320	2401	160	Notice of Ap	ppeal	90 90	$\overline{C}$
1003 520 2003 260 Plant filing fee	1402	320	2402	160	Filing a brie	f in support o	of an appeal	iTi
1004 750 2004 375 Reissue filing fee ,	1403	280	2403	140	•	oral hearing	1 7 2	
1005 160 2005 80 Provisional filing fee	1451	1,510	1451				olic use proceeding	
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2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE  Extra Fee from	1502	470	2502	235	_		ue) 800	
Total Claims					Design issue			
Independent	1503 1460	630 130	2503 1460	315	Plant issue	the Commiss	nianas	
Claims				130				
Multiple Dependent =	1807	50	1807	50	_		CFR 1.17(q)	
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Code (\$) Code (\$) Fee Description	8021	40	8021	40			ssignment per of properties)	
1202 18 2202 9 Claims in excess of 20 1201 84 2201 42 Independent claims in excess of 3	1809	750	2809	375	Filing a sub (37 CFR 1.1		final rejection	
1203 280 2203 140 Multiple dependent claim, if not paid	1810	750	2810	375		lditional invei 37CFR 1.129		
1204 84 2204 42 ** Reissue independent claims	1801	750	2801	375	-		examination (RCE)	
over original patent	1802	900	1802	900		expedited ex	xamination	
1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent	Other	ا fee (spec	cify)		of a design	application		
**or number previously paid, if greater; For Reissues, see above	*Redu	iced by E	Basic Fil	ing Fee	Paid	SUBTO	TAL (3) (\$)	180.00
SUBMITTED BY						Complete (	(if applicable)	
Name (Print/Type) Thomas J. D'Amico	-	ration No ey/Agent)		371			(202) 828-2232	
Signature	>					Date	July 26, 2003	